

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-3 (Cancelled)

4. (Currently Amended) A mounting table, comprising:

a heating unit including a reflector plate made of an opaque quartz, and a quartz tube welded to a surface of the reflector plate, and

a mounting table cover member installed to cover the reflector plate, a target object being mounted thereon,

wherein the mounting table cover member is made of a light absorbing material, and a carbon wire which generates heat when a current is applied thereto is disposed between the reflector plate and the mounting table cover member,

wherein the mounting table cover member has a circular lid shape and an inner surface of a sidewall of the mounting table cover member has a diameter greater than a diameter of the reflector plate so that the inner surface of the sidewall of the mounting table cover member is in contact with a side surface of the reflector plate to be circumscribed thereto, and

wherein a positioning projection having a ring-shape and made of a same material as that of the reflector plate is provided in an upper direction at a peripheral region of the reflector plate and positions the mounting table cover member which is inserted by the positioning projection, the positioning projection contacting with the mounting table cover member.

5. (Original) The mounting table of claim 4, wherein the mounting table cover member is made of SiC.

6. (Currently Amended) A heat treatment apparatus, comprising:

a mounting table including a heating unit having a reflector plate made of an opaque quartz, and a quartz tube welded to a surface of the reflector plate; a mounting table cover member installed to cover the reflector plate, a target object being mounted thereon, wherein the mounting table cover member is made of a light absorbing material, and a carbon wire which generates heat when a current is applied thereto is disposed between the reflector plate and the mounting table cover member;

a processing chamber accommodating therein the mounting table;

a gas supply unit for supplying a gas in the processing chamber; and

a vacuum pumping system for evacuating the processing chamber,

wherein the mounting table cover member has a circular lid shape and an inner surface of a sidewall of the mounting table cover member has a diameter greater than a diameter of the reflector plate so that the inner surface of the sidewall of the mounting table cover member is in contact with a side surface of the reflector plate to be circumscribed thereto, and

wherein a positioning projection having a ring-shape and made of a same material as that of the reflector plate is provided in an upper direction at a peripheral region of the reflector plate and positions the mounting table cover member which is inserted by the positioning projection, the positioning projection contacting with the mounting table cover member.

7. (Previously Presented) The heat treatment apparatus of claim 6, wherein the quartz tube is bent.

8. (Previously Presented) The heat treatment apparatus of claim 6, wherein the quartz tube is divided and welded to a plurality of zones on the surface of the reflector plate.

9 – 14 (Canceled).

15. (Previously Presented) The mounting table of claim 4, wherein the quartz tube is divided and welded to a plurality of zones on the surface of the reflector plate.

16 (Canceled).

17. (Previously Presented) The mounting table of claim 4, further comprising joint pins, wherein the quartz tube is jointed to the surface of the reflector plate by the joint pins.

18. (Previously Presented) The mounting table of claim 4, wherein a lower half portion of the quartz tube is opaque quartz, and an upper half portion of the quartz tube is transparent quartz.

19 -22 (Canceled).

23. (Previously Presented) The mounting table of claim 4, wherein the carbon wire is inserted in the quartz tube disposed in a space surrounded by the reflector plate and the mounting table cover member and the diameter of the inner surface of the sidewall of the mounting table cover member is slightly greater than the diameter of the reflector plate so

that the inner surface of the mounting table cover member is in close contact with the side surface of the reflector plate.

24. (Previously Presented) The mounting table of claim 6, wherein the carbon wire is inserted in the quartz tube disposed in a space surrounded by the reflector plate and the mounting table cover member and the diameter of the inner surface of the sidewall of the mounting table cover member is slightly greater than the diameter of the reflector plate so that the inner surface of the mounting table cover member is in close contact with the side surface of the reflector plate.

25 (New) The mounting table of claim 4, wherein the positioning projection is disposed along an edge of the reflector plate and comprises a side wall contacting the mounting table cover member along a height of the mounting table cover member.

26 (New) The mounting table of claim 6, wherein the positioning projection is disposed along an edge of the reflector plate and comprises a side wall contacting the mounting table cover member along a height of the mounting table cover member.